

Certificate

of Successful Participation
in the Focus Area AI Skills

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The focus area "AI Skills" is part of the transferable skills program offered by the Graduate Center (GRACE) at the University of Basel. Doctoral and postdoctoral researchers who complete this focus area acquire fundamental competencies and practical skills in working with (generative) AI.





Module 1: Technological Foundations of (Generative) AI

This module provides an understanding of the technological basis of (generative) AI. This includes the central model types (language, image, and multimodal models), as well as their architecture and training. The goal is to convey the technical foundations of (generative) AI and thereby enable a reflective use of AI tools.

- Introduction to Machine Learning (with Python)
- Understanding LLMs

Module 2: Tools & Application of (Generative) AI

The focus of this module is the practical application of (generative) AI. Participants learn about different tools and their areas of application and engage in critical evaluation of their use. The goal of this module is to enable participants to use (generative) AI tools in a targeted and reflective manner for different use cases.

- Exploring AI for Science Communication
- How to use generative AI for academic writing: basics, ethics, procedures, and hacks

Module 3: Normative Dimensions & Future Development of AI

This module addresses fundamental ethical, legal, and generally normative questions concerning (generative) AI, as well as potential consequences of its further development and broad societal deployment. The goal of the module is for participants to develop normative judgment regarding the use of (generative) AI and an informed opinion on the possible consequences of its widespread economic and societal use.

- Human–AI Synergy and the Jagged Frontier of Generative AI
- Stochastic Parrots and Beyond: Normative Dimensions of Generative AI

